

ABSTRACT

An electronic lock utilizes two microprocessors remote from each other for enhanced security. The first microprocessor is disposed close to an input device such as a keypad, and the second microprocessor is disposed close to the lock mechanism and well protected from external access. The first microprocessor transmits a communication code to the second microprocessor when it receives via the input device an access code that matches a preset access code. The second microprocessor opens the lock if the transmitted communication code matches a preset communication code. The dual-microprocessor arrangement is advantageously used in a voice controlled access control system and in a motorcycle ignition control system. The present invention further provides an electronic access control system which has a master electronic key having a preset number of access, and an electronic alarm system for a bicycle that has a remote control mounted in the helmet of the rider.